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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/964,386	09/28/2001	Nurhan Ergun	P21479	3248
7055	7590	07/09/2004	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			LEUNG, JENNIFER A	
			ART UNIT	PAPER NUMBER
			1764	

DATE MAILED: 07/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**

Application No.

09/964,386

Applicant(s)

ERGUN ET AL.

Examiner

Jennifer A. Leung

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--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 14 June 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY** [check either a) or b)]

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.
- b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
- ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
  - (b) ☐ they raise the issue of new matter (see Note below);
  - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
  - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_

3. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: see Continuation Sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☒ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_

Claim(s) objected to: \_\_\_\_\_

Claim(s) rejected: 1,3-32 and 35.

Claim(s) withdrawn from consideration: \_\_\_\_\_

8. ☐ The drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_
10. ☐ Other: \_\_\_\_\_

*Hiem Tran*  
**HIEM TRAN**  
**PRIMARY EXAMINER**

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## CONTINUATION OF ITEM 5.

The request for reconsideration has been considered but it does not place the application in condition for allowance, for the same reasons as set forth in the Final Office Action.

From page 5 (last paragraph) to page 6 (first paragraph), Applicants argue,

“... the Examiner contends that... Kokubo discloses a reactor comprising a static mixer, as reaction section (1) comprises a stationary or fixed mixing element in the form of a static partition panel 1 having opening 4, which the Examiner contends inherently provided additional mixing of the fluids upon accelerated flow of the fluids through the restricted opening.

... the interpretation of Kokubo as comprising a static mixer is without appropriate basis, and the rejection is therefore not adequately supported, and should be withdrawn.

... a static mixer... does not have moving parts. In contrast, Kokubo includes a mixer including turbine blades 3' comprising 4 blades in each chamber with are rotated by the motor. Certainly, the mixing in Kokubo is dynamic, and there is absolutely no teaching or suggestion in Kokubo that the mixing can be achieved with a static mixer.”

The Examiner respectfully disagrees and maintains that the Kokubo apparatus structurally meets the claim of a “reaction section which comprises a static mixer” as defined by Applicants. The Examiner finds support in this assertion by referring to Applicant’s written description (page 7, lines 22-24), which states,

“... the static mixer preferably consists of a pipe filled with balls of various size and/or possibly with devices such as baffles, *propellers*, resistors, etc.”

As defined in the English Language (The American Heritage<sup>®</sup> Dictionary of the English Language, Fourth Edition, ©2000 Houghton Mifflin Co.), a propeller is,

“A machine for propelling an aircraft or boat, consisting of a *power-driven shaft with radiating blades* that are placed so as to thrust air or water in a desired direction when spinning.”

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According to Applicants' own definition of a static mixer, the reaction section (1) of Kokubo thus meets the claims, since the reaction section comprises the baffles (i.e., the static partition panel 1 having opening 4) and the propellers (i.e., turbine blades 3' rotated by a motor), as indicated above. In any event, note that claim 1 instantly recites, "a reaction section which *comprises* a static mixer", thereby indicating that the claim is open-ended, wherein named elements are essential, but other elements may be added and still form a construct within the scope of the claim.

From page 7 (second paragraph) to page 7 (last paragraph), Applicants argue,

"... the Examiner contends that Kokubo discloses a pump and a quantitative pump, and contends that the limitation of "high-pressure" provides no additional structural limitation to Applicants' disclosed pumping means, since the operational pressure of the pump is not an element of the apparatus, but a process limitation which is asserted to hold no patentable weight in apparatus claims.

... Applicants respectfully submit that a high pressure pump is a structural limitation that must be given weight in an apparatus claim... For example, regular pumps are constructed and arranged to operate with a pressure up to 40 or a maximum of 60 bar... high pressure pumps are constructed and arranged to operate with a pressure up to 200 bar...

... an advantage of the present invention is that the pressure at the beginning of transesterification can be up to 200 bar."

The Examiner respectfully disagrees and maintains her rejection, since it is noted that the features upon which applicant relies (i.e., a specific construction or arrangement of the pumps to enable "high pressure" operation) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Additionally, it is noted that the specification currently discloses pumps operating at a pressure that can be "up

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to 200 bar”, thereby indicating that pumps operating below the 200 bar threshold are acceptable.

Beginning on page 8 (second paragraph), Applicants argue,

“Ake is non-analogous art, and... one having ordinary skill in the art would not modify Kokubo with balls as taught by Ake... Kokubo discloses a mixer including turbine blades 3' comprising 4 blades in each chamber which are rotated by the motor turbines. One having ordinary skill in the art would not modify the structure of Kokubo to include balls therein, especially when such balls would be expected to interfere with the rotation of the turbine blades 3'.”

In response to applicant's argument that the Ake reference represents nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, both Kokubo and Ake pertain to the field of mixing, and both seek to provide means for enabling a continuous and efficient mixing of their plural feed streams. Additionally, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). It is further noted that Applicant's disclosure (page 7, lines 22-24) states,

“... the static mixer preferably consists of a pipe filled with *balls of various size and/or possibly with devices such as baffles, propellers, resistors, etc.*”

Therefore, one would expect the reaction section (1) of Kokubo to be able to function with both balls and turbine blades in place, according to Applicant's teachings.

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From page 8 (last paragraph) to page 9 (first paragraph), Applicants argue,

“... there is no motivation for modifying Kokubo to include a reaction section comprising an ultrasound device. The rejection cannot merely point to isolated disclosure in Murry, and without any motivation to modify the structure disclosed in Kokubo.

Similarly, the rejections applying to Pool, Muldihara and Brockman are without appropriate basis in that the rejections apply to isolated disclosures of the documents, but do [not] supply adequate motivation for modifying Kokubo.”

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, one would have been properly motivated to combine the cited secondary references with the primary reference of Kokubo, since it has been held that the substitution of known equivalent structures (i.e., one type of known mixing means for another; one type of known separation means for another) merely involves ordinary skill in the art, *In re Fout* 213 USPQ 532 (CCPA 1982); *In re Susi* 169 USPQ 423 (CCPA 1971), *In re Siebentritt* 152 USPQ 618 (CCPA 1967); *In re Ruff* 118 USPQ 343 (CCPA 1958). The secondary references to Murry, Pool, Muldihara and Brockman are cited to merely illustrate that the claimed mixing or separation means comprise knowledge that is generally available to one of ordinary skill in the art.

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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A. Leung whose telephone number is (571) 272-1449. The examiner can normally be reached on 8:30 am - 5:30 pm M-F, every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn A. Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jennifer A. Leung  
June 28, 2004 *ja*

*Hien Tran*  
**HIEN TRAN  
PRIMARY EXAMINER**